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CHEM IND LTD**(72) Inventor: **NISHIZAWA SUSUMU
MATSUMOTO HIROO
OBARA YOSHIO**(54) **MANUFACTURE OF
QUINOLINECARBOALDEHYDE**

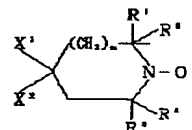
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(57) Abstract:

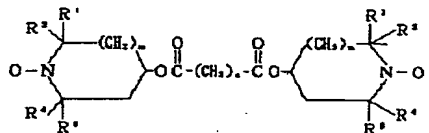
PURPOSE: To obtain a quinolinecarboaldehyde compound in high yield by oxidizing 2-cyclopropyl-4-(4-fluorophenyl)-3-hydroxymethylquinoline in the presence of a specific nitrosyl free radical derivative with a hypohalite.

CONSTITUTION:

2-Cyclopropyl-4-(4-fluorophenyl)quinoline-3-carboaldehyde is obtained by oxidizing 2-cyclopropyl-4-(4-fluorophenyl)-3-hydroxymethylquinoline. This oxidation reaction is carried out in the presence of a nitrosyl free radical derivative of formula I or formula II (X^1 and X^2 are each H, a halogen, OH, a 1-5C alkyl, a 5-6C cycloalkyl, a 1-5C alkoxy, a 1-10C acyloxy, etc., or X^1 and X^2 together form O; R^1 to R^4 are each a 1-5C alkyl; m is 0 to 1) with a hypohalite. Preferable examples of the nitrosyl free radical derivative include 2,2,6,6-tetramethylpiperidine-1-oxyl, etc. Further, potassium bromide or sodium bromide is preferably added into the reaction system.



I



II